"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Ivan Nikolayevich; KOBRIN, B., redaktor; IGNAT'YEVA, A., tekhnicheskiy redaktor

[Strawberries in collective farm orchards] Zemlianika v kolkhoznom sadu. [Moskva] Moskovskii rabochii, 1956. 36 p. (MLRA 9:9)
(Strawberries)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, I.N., kand. sel'skokhoz. nauk

Experiments in remote hybridization of strawberries. Trudy TSGL 6:279-302 '57. (MIRA 12:10)
(Strawberry breeding)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, K.S.

Zones of metamorphism affiliated with deep faults in the upper Amur Valley. Visnyk L'viv.un. Ser.geol. no.1:90-94 '62.
(MIRA 16:7)

(Amur Valley--Faults (Geology))
(Amur Valley--Metamorphism (Geology))

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Apparatus + Methods of Testing

BCS

1417. A new colorimetric reaction for magnesium - M. A. Shashkin (Zavod. Lab., No. 6, 748, 1950; abstracted in Stavivo, 28, 280, 1950). A freshly prepared soln. of Nikonogene (sodium 1-amino-2naphthol-6-sulphonate) forms a green ppt. with Mg^{2+} in ammoniacal soln. Details are given of the application of this reaction.

Irkutsk Metallurgical Inst. (Mining?)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, M. A.

"A New Colorimetric Reaction for Gold Ions," Zavodskaya Laboratoriya, Vol. 18, No. 3, p 288, 1952.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, M. A.:

Shashkin, M. A.:

"The determination of gold in cyanide solutions using activated charcoal." Min Higher Education USSR. Ural Polytechnic Inst imeni S. M. Kirov. Sverdlovsk, 1956. (Dissertation For the Degree of ~~Doctor in Sciences~~ Cand. Chem. Sci).

Knizhnaya letopis' #45790
No 34, 1956. Moscow.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

AKHVONEN, V.A.; GRENBERG, Ye.I.; GENIS, M.Ya.; FEYGINA, E.M. ZAKHAROVA, V.S.; KOVALEVA, R.A.; ZALEVSKAYA, T.N. SHASHKIN, M.A.; KOVALENKO, P.N.; ZAK, A.G.; AKHMETOVA, S.A.; MOSTRYUKOV, P.M.; VEYSEYSKAYA, N.D.

Brief reports. Zav.lab. 23 no.7:801-802 '57. (MLRA 10:8)

1.Institut geologii rudnykh mesterozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (for Akhvonen) 2.Dneprepetrovskiy Trubopro katnyy zavod imeni V.I. Lenina (for Grenberg, Genis) 3. Angarskiy rementno-mekhanicheskiy zavod (for Shashkin) 4.Rostovskiy gosudarstvennyy universitet (for Kovalenko) 5. Karagandinskiy zavod sinteticheskogo kauchuka (for Zak, Akhmetova, Mostryukov, Veyseyskaya).
(Chemistry, Analytic)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, M.A.

Quantitative determination of gold in cyanide electrolytes.
Zav.lab. 27 no.2:145-146 '61. (MIRA 14:3)

1. Angarskiy remontno-mekhanicheskiy zavod.
(Gold--Analysis) (Cyanides)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

BRAY, I., inzh.; SHASHKIN, P., inzh.

Regeneration of used oils. Avt.transp. 41 no.4:29-32 Ap '63.
(MIRA 16:5)

1. Vsesoyuznaya kontora Vsesoyuznogo tresta po regeneratsii otrabotannykh neftyanykh masel Glavneftesbyta Ministerstva neftyanoy promyshlennosti SSSR.
(Gas and oil engines--Lubrication)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, P.; BRAY, I.

Reclamation of used oils. Avt. transp. 43 no.2:15-17 F '65.
(MIRA 18:6)

1. Vsesoyuznaya kontora po regeneratsii otrabotannykh neftyanykh masel.

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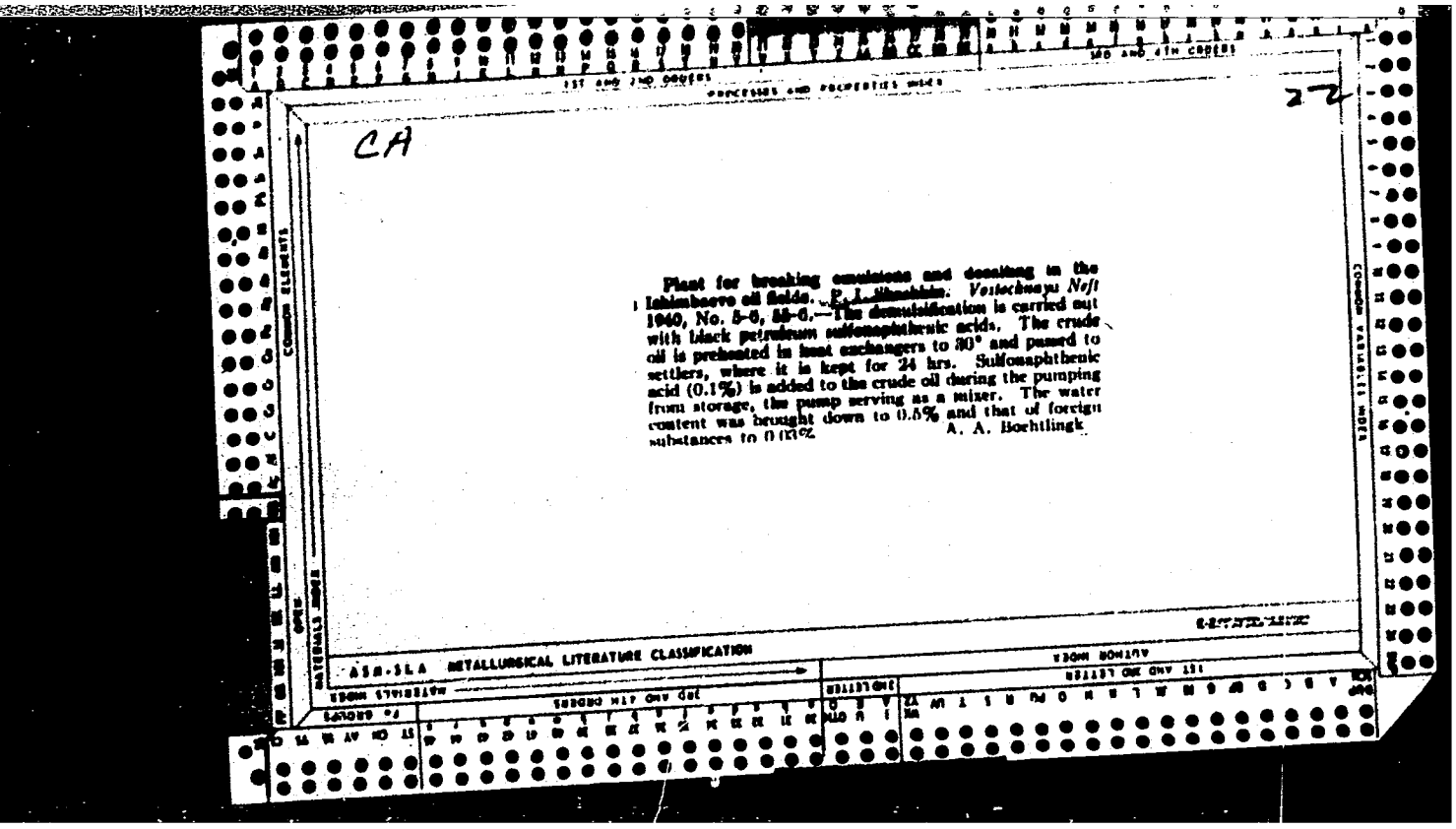

CA

27

Plant for breaking emulsions and desalting in the Ishimbaevo oil fields. P. I. Shushkin. *Voistochnaya Neft* 1940, No. 5-6, 55-6.—The demulsification is carried out with black petroleum sulfonaphthenic acids. The crude oil is preheated in heat exchangers to 80° and passed to settlers, where it is kept for 24 hrs. Sulfonaphthenic acid (0.1%) is added to the crude oil during the pumping from storage, the pump serving as a mixer. The water content was brought down to 0.5% and that of foreign substances to 0.05%. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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H SHKIN, P. I.

Regeneratsiya otrabotannykh neftyanykh masel; kratkoe rukovodstvo dlya operatorov (Regeneration of waste petroleum oils; brief guide for the operator) Moskva, Gostoptekhizdat, 1952.
110 p. illus., tables
"Literatura": p. 109
At head of title: Russia. Ministerstvo Neftyanoy Promyshlennosti.

SO: N/5
735.6
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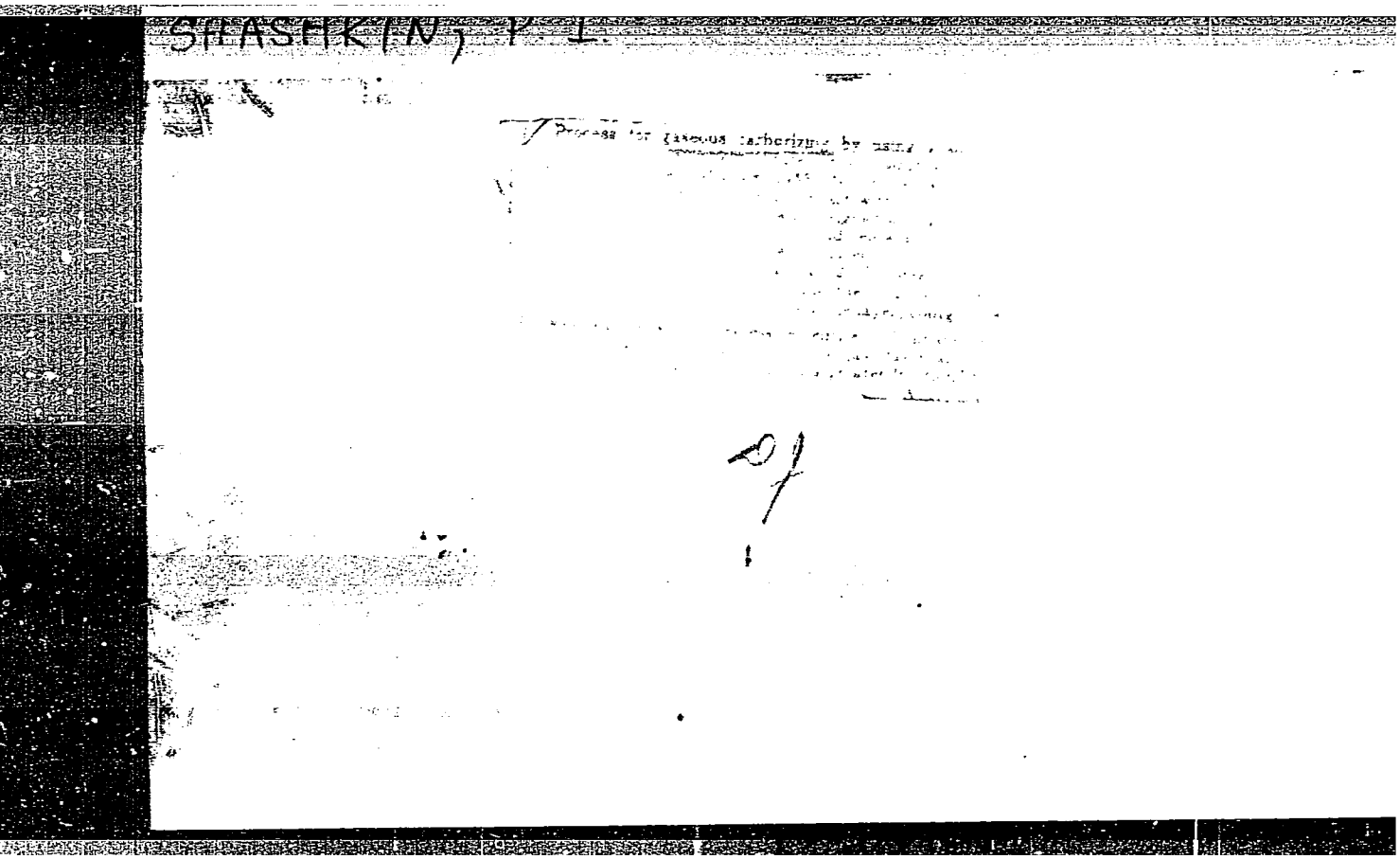
"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, P. I.

[Collecting and storing waste oils] Sbor i khranenie otrabotannykh masel. Moskva, Gostoptekhizdat, 1955. 29 p. (MLRA 8:12)
(Automobiles--Lubrication)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9



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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, P.I.

25(5) p.4 PHASE I BOOK EXPLOITATION SOV/1359

Spravochnik mekhanika mashinostroitel'nogo zavoda v dvukh tomakh. t. 1: Organizatsiya i konstruktorskaya podgotovka remontnykh rabot (Handbook for Mechanics of Machinery Manufacturing Plants in Two Volumes. Vol. 1: Organization and Design-Preparation for Repair Work) Moscow, Mashgiz, 1958. viii, 767 p. 40,000 copies printed.

Resp. Ed.: Noskin, R.A.; Candidate of Technical Sciences; Ed.: Gliner, B.M., Engineer; Tech. Ed.: Sokolova, T.F.; Eds. of Set: Borisov, Yu.S., Engineer, A.P. Vladziyevskiy, Doctor of Technical Sciences, and R.A. Noskin, Candidate of Technical Sciences; Managing Ed. for Reference Literature (Mashgiz): Krylov, V.I., Engineer.

PURPOSE: This handbook is intended for personnel responsible for repair and maintenance operations in machinery manufacturing plants.

COVERAGE: The handbook contains information on the operation of industrial equipment, organization of repair and maintenance, design-preparation for maintenance work, modernization of metal-cutting machine tools, and the economics of maintenance. Maintenance personnel of the following plants participated in the preparation of this handbook: Leningrad Plant imeni Kirov, Khar'kov Plant

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for Transport Machinery imeni Malyshev, Moscow Plant imeni Likhachev, Chelyabinsk Tractor Plant, etc. Contributions by the following are also acknowledged: workers of scientific research institutes (ENIMS, TsNIITMASH, NITI) and vtuzes (MVTU imeni Bauman, Leningrad Polytechnical Institute, Moscow Institute for Engineering Physics, Moscow Industrial Engineering Institute); and workers in engineering and planning institutes (VPTI b. MINTRANSMASH, VPTI b. MINTYAZHMASH, GSPI-8). There are no references.

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SHASHKIN, P., inzh.

New electric furnaces used in oil purifying units. Avt. transp. 36 no.12:20 D '58. (MIRA 11:12)
(Electric furnaces) (Oil reclamation)

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SHASHKIN, P. I., Cand Tech Sci -- (diss) "A contactless method of cementation by use of a solid carburizer." Saratov, 1960. 14 pp with diagrams; (Ministry of Higher Education USSR, Saratovskiy State Univ im N. G. Chernyshevskiy); 150 copies; free; (KL, 19-60, 136)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Prokhor Ivanovich. Prinimali uchastiye: ZILLER, G.K.; BEREZHNAYA, V.D. LEVINA, Ye.S., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Reclamation of spent petroleum oils] Regeneratsiia otrabotannykh neftianykh masel. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 303 p. (MIRA 13:11)
(Oil reclamation)

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SHASHKIN, P.I., inzh.; BRAY, I.V., inzh.; KISELEV, A.A., inzh.; MASLENKOVSKIY, L.G., inzh.

Unit for regenerating the wash liquid. Vest.mash. 41 no.7:75-76 Jl '61. (MIRA 14:6)

(Cleaning compounds)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, P.I.; BRAY, I.V.; KISELEV, A.A.

RM-100 oil reclaiming unit. Nefteper. i neftekhim. no.8:22-27 '63. (MIRA 17:8)

1. Vsesoyuznaya kontora po regeneratsii otrabotannykh neftyanykh masel.

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SHASHKIN, S. V.

PHASE I BOOK EXPLOITATION 318

Demichev, Aleksey Dmitriyevich and Shashkin, Semen Vasil'yevich

Vysokochastotnaya zakalka (High-frequency Case Hardening) 2nd ed., rev. and enl. Moscow, Mashgiz, 1957. 52 p. (Bibliotechka vysokochastotnika-termista. Vyp. 3) 10,000 copies printed.

Ed.: (Title page): Fogel', A.A., Candidate of Tech. Sciences; Reviewer: Donskoy, A.V., Dr. of Tech. Sciences, Prof.; Ed. of Publishing House: Gofman, Ye. K.; Tech. Ed.: Speranskaya, O.V.; Editorial board of series: Fogel', A.A., Candidate of Tech. Sciences (Chairman); Spitsyn, M.A., Candidate of Tech. Sciences, Slukhotskiy, A.Ye., Candidate of Tech. Sciences, Glukhanov, N.P., Candidate of Tech. Sciences (Ed. of this issue); and Baumner, A.V., Engineer. Chief Ed. of the Leningrad Division of Mashgiz: Bol'shakov, S.A., Engineer.

PURPOSE: This booklet is one of a series published for the purpose of promoting high-frequency case hardening and pooling advanced production "know-how". It is intended for a large circle of industrial workers interested in the techniques of high-frequency case hardening.

COVERAGE: The authors give general descriptions of high-frequency devices for induction case hardening of steel and cast-iron products. They discuss the problem of selecting proper frequencies to be used in case hardening of

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High-frequency Case Hardening (Cont.)

various surfaces of various shapes. There are 11 references, all USSR.

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DENICHEV, A.D.; GOLOVIN, G.F.; SHASHKIN, S.V.; DONSKOY, A.V., doktor tekhn. nauk prof., retsenzent; FOGEL', A.A., kand. tekhn. nauk, red.

[High-frequency hardening] Vysokochastotnaia zakalka. Izd.3., ispr. i dop. Pod red. A.A.Fogelia. Moskva, Mashinostroenie, 1965. 83 p. (MIRA 18:12)

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1. SHASHKIN, S. G., Eng. KATS, N.V.

2. USSR (600)

4. Machine Tools - Maintenance and Repair

7. Establishing a standard system for planned, periodic repairs. Vest mash No. 1 1953

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

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SHASHKIN,S.V., inzhener

Theory and method of constructing locomotive turnover graphs having 168 and 336 hour grids. Trudy Khab. IIT no.8:28-40 '55.
(Railroads--Management) (MLRA 9:1)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, V.L.

Source of material forming sedimentary deposits. Trudy Inst. geol.KirFan SSSR no.5:117-122 '54. (MLRA 9:12)

(Ore deposits)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASKIN, V.L.

Control of geological specimen analyses according to group specimens. Razved. i okh.nedr. 21 no.4:21-26 Jl-Ag '55. (MLRA 9:2)
(Ores--Sampling and estimation)

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15-57-1-953

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 152 (USSR)

AUTHOR: Shashkin, V. L.

TITLE: Controlled Sampling and Controlled Analyses of Geologic Samples (O kontrol'nom oprobovanii i kontrol'nykh analizakh geologicheskikh prob)

PERIODICAL: Tr. In-ta geol. AN KirgSSR, 1956, Nr 7, pp 111-124.

ABSTRACT: The author points out that in the literature it is not easy to detect the difference between controlled sampling and controlled analyses of samples. He concludes that it is necessary to introduce compulsory controlled sampling during exploration for nonferrous and rare metals and to include special requirements for controlled sampling in the actual instructions for VKZ /Vsesoyuznaya komissiya po zapasam polezhykh iskopayemykh (All-Union Commission of Mineral Resources)/. Considering the questions of the representative character of sampling, N. V. Baryshev /Tochnost'

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Controlled Sampling and Controlled Analyses (Cont.)

analyza prob, ispol'zuyemykh dlya podscheta zapasov. Materialy VKZ, Vyp. I, Gosgeolizdat, 1948 (The Precision of Analyzing Samples Used for Calculating Reserves). Data from VKZ, Nr 1, State Geological Literature Press, 1948/ with complete justification proposed that the requirements for the precision of analysis be determined on the basis of a linear relationship for the degree to which the samples are representative. However, this proposal, in its time, reflected neither the methods of sampling nor the instructions for VKZ. Permissible accidental errors in analyses, listed in the instructions for VKZ, consider only analytical possibilities and do not consider at all the representative nature of the sampling in reference to different determinations of mineralization. It follows that standards for permissible average accidental error in the analyses of samples, associated with the degree to which the samples are representative, should be treated and included in the instructions for the VKZ. This error is characterized by the average divergence between basic and controlled sampling. Such established standards permit one to make wider use of the simplified methods of sampling and of analyzing samples.
Card 2/3

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Controlled Sampling and Controlled Analyses (Cont.)

By considering the representative character of samples, one might admit the use of simplified methods of sample selection which increase accidental errors but do not admit systematic errors. The selection of methods for treating results of controls leads the author to conclude that the views of I. P. Sharapov (Razvedka i okhrana nedr, 1954, Nr 1), B. Ya. Yufa (Razvedka i okhrana nedr, 1951, Nr 6), and N. V. Baryshev (Kontrol' oprobovaniya. Materialy VKZ, Vyp. 2, Gosgeolizdat, 1948) on the statistical methods of showing systematic errors involve a number of fundamental failings and that the use of such methods cannot be recommended. The author believes it most expedient to prepare group controls, which may be used both for internal and lateral controls. He describes the techniques of selecting group controls, the method of treating the results of the controls, and the advantages of the recommended method.

A. P. P.

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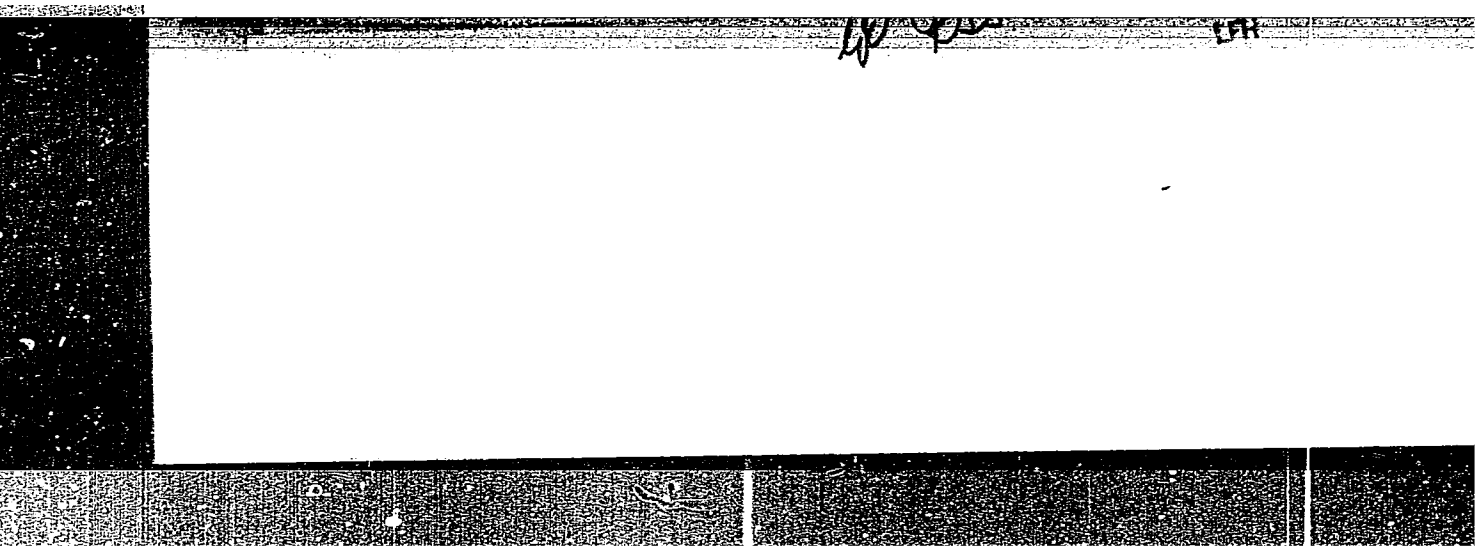

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The book surveys the radioactive elements and gives their essential characteristics. Terminology and units are defined and theories of radioactivity explained. Material on apparatus and applied prospecting is limited to about 50 pages. Of particular interest is Chapter VI, dealing with the problem of determining the geological age of any given formation by radioactive methods. There are 95 tables, 21 figures, 122 Soviet references and 54 English, 4 German, and 1 French reference.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

Handbook on Radiometry for Geophysicists and Geologists 785

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, V.L.

PA - 2052

AUTHOR: ŠAŠKIN, V.L.

TITLE: Quantitative Radiometric Measurements of Radioactive Ores in their Natural Deposits.

PERIODICAL: Atomnaia Energiia, 1957, Vol 2, Nr 1, pp 48-53 (U.S.S.R.)
Received: 3 / 1957 Reviewed: 3 / 1957

ABSTRACT: Report 1: The measurement of the γ-radiation of radioactive ores in their natural deposits, i.e. immediately when working in the mine drift or in a fissure allows the determination of the percentage of radioactive elements of the ores without the selection of samples and without a chemical analysis. The preciseness of such qualitative measurements depends to a great extent on considering the spectral composition of the γ-radiation to be investigated. The spectrum of the γ-rays of the radioactive ores is determined by the scattering of radiation and depends on the composition of the ore. The intensity, however, of the recorded γ-radiation of the ore deposit depends on the material of the cathode of the counter (tungsten, copper, graphite), since the counters have a different spectral sensitivity. The ratio of the intensities measured with Geiger counters with different cathodes allows the characterization of the spectral composition of the γ-radiation of the ore. In order to express the results in general units (microroentgen per hour) the radiometers are gauged with a punctiform gauge, the method of gauging,

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Quantitative Radiometric Measurements of Radioactive Ores in their Natural Deposits.

however, does not exclude a dependence of the data of the radiometers on the spectral sensitivity of the counter.
This paper determines important conversion coefficients which connect the intensity of the γ-radiation with the percentage of radioactive elements in the ore. These coefficients are shown in a table and apply in the case of measurements on the surface of ore deposits and in the fissure. In the case of measurements in fissure the γ-rays of low energy scattered backwards are of great importance. With the aid of these coefficients the percentage of radioactive elements in the ore is calculated by the data of the counting devices. Experimental and theoretical investigations lead to the following conclusions which are important for practical measurements: In the case of counters that are sensitive to the soft γ-radiation the dependence of the recorded intensity of γ-radiation on the average number of the nuclear charge of the deposit, of the cathode material, and of the radiometer casing is to be taken into account. Furthermore, measuring of the hard γ-rays with counters that are only to a small extent sensitive to soft γ-rays are expedient.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

AUTHOR: SHASHKIN, V.L. PA - 2260

TITLE: The Quantitative Radiometric Measuring of Radioactive Ore in Natural Deposits. II. Report. (Kolychestvennyyw radiometricheskiye izmereniya radioaktivnykh rud v yesteystvennom zaleganii. Soobshcheniye II. Russian).

PERIODICAL: Atomnaia Energiia, 1957, Vol 2, Nr 2, pp 157-162 (U.S.S.R.)

Received: 3 / 1957 Reviewed: 5 / 1957

ABSTRACT: The present work discusses the method of the radiometric examination of radioactive ores from their gamma radiation and the method of quantitative interpretations of the results of γ-carottage of ore fissures.

Radiometric investigation: The radioactivity of uranium- and thorium ores facilitates a direct determination of their uranium- and thorium content without extraction of ore samples. This method basing upon measuring the intensity of gamma radiation was described as radiometric examination. At first a formula for the connection between the intensity of γ-radiation on the surface of an infinite layer and the content of radioactive elements in this layer is given. Aocording to this formula the content of radioactive elements in the case of constant attenuation coefficients is proportional to the intensity of γ-radiation. Theoretical bases of the method are discussed in short.

In practice, the so-called fissure screen fitted with an enclosure is mostly used. In the case of an even distribution of the ores and if the

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The Quantitative Radiometric Measuring of Radioactive Ore in Natural Deposits. II. Report.

screening coefficient is known from the differences of the intensity of γ-radiation in the case of open and closed fissures the content of radioactive elements in the given layer can be determined. Next, measuring in the case of an uneven distribution of ores is discussed. Radiometric examination is carried out with different types of field radiometers. The results of radiometric examinations are as a rule controlled by means of ridge examination. The quantitative interpretation of γ-carottage permits the determination of the linear supply of radioactive elements in the fissure (pit ?), i.e. the product of power of the ore body plus content. In the case of an insufficient yield of the core, gamma-carrotage is the only method that permits a quantitative characterization of the fissure (pit) covered by the ore body. The quantitative interpretation of γ-carottage bases upon the use of the anomaly-surface. Details are discussed here. (3 illustrations and 2 tables).

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SHASHKIN, V.L.; SHUMILIN, I.P.

Radiometric method for determining the uranium content in ore samples. Atom. energ. Supplement no.6:126-135 '57. (MIRA 11:7)
(Radiometer) (Uranium ores--Analysis)

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SHASHKIN, .V.L.; SHUMILIN, I.P.; PRUTKINA, M.I.

Relation between β- and γ-radiation of natural radioactive elements. Atom. energ. Supplement no.6:136-145 '57. (MIRA 11:7)
(Radioactivity)

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GRAMMAKOV, A.G.; SHASHKIN, V.L.; SHIRYAYEVA, M.B.; SURAZHSKIY, D.Ya., red.; NIKONOV, A.I., red.; KLEPTSOV, F.F., red.; VLASOVA, N.A., tekhn.red.

[Instructions on gamma-ray testing of radioactive ores in the ore bed] Rukovodstvo po gamma-oprobovaniiu radioaktivnykh rud v estestvennom zaleganii. Moskva, Izd-vo glav.upr. po ispol'-zovaniiu atomnoi energii pri Sovete Ministrov SSSR, 1959. 56 p. (MIRA 13:2)

(Radioactivity--Measurements)
(Ores--Sampling and estimation)

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MEZHIBORSKAYA, Kh.B.; SHASHKIN, V.L.; SHUMILIN, I.P.; PCHELINTSEVA, G.M., red.; VLASOVA, N.A., tekhn.red.

[Analysis of radioactive ores by the β and γ method] Analiz radioaktivnykh rud β-γ-metodom. Moskva, Izd-vo Glav.uprav.po ispol'zovaniiu atomnoi energii pri Sovete Ministrov SSSR, 1960. 63 p. (MIRA 13:10)

(Radioactive substances) (Beta rays) (Gamma rays)

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YAKUBOVICH, Aleksandr Lazarevich; SHASHKIN, V.L., retsenzent; YEREMEYEV, A.N., red.; MUKHIN, S.S., red.izd-va; GUROVA, O.A., tekhn.red.

[Radiometric prospecting apparatus] Poiskovo-razvedochnaia radiometricheskaia apparatura. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1960. 205 p. (MIRA 14:4)

(Radioactivity prospecting--Equipment and supplies)

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PETROV, G.I.; KUTENKOV, M.V.; TENENBAUM, I.M.; YEVSEYEVA, L.S.; KONSTANTINOV, M.M., nauchnyy red. [deceased]; SHASHKIN, V.L., nauchnyy red.; SURAZHSKIY, D.Ya., nauchnyy red.; ZAVODCHIKOVA, A.I., red.; MAZEL', Ye.I., tekhn.red.

[Methods of geological and geophysical exploration and control in uranium mines] Metody geologo-geofizicheskogo obsluzhivaniia uranovykh rudnikov. Moskva, Izd-vo Gos.kom-ta Soveta Ministrov SSSR po ispol'zovaniiu atomnoi energii, 1960. 217 p. (MIRA 13:10)

(Mining geology) (Uranium ores)

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SURAZHSKIY, Daniil Yakovlevich. Prinimali uchastiye: PUKHAL'SKIY, L.Ch.; POSIK, L.N.; SHASHKIN, V.L.. SMIRNOV, V.I., red.; ALYAB'YEV, A.F., red.; POPOVA, S.M., tekhn.red.

[Methods of prospecting and exploration of uranium deposits] Metody poiskov i razvedki mestorozhdenii urana. Pod red. V.I. Smirnova. Moskva, Izd-vo glav.upr.po ispol'zovaniiu atomnoi energii pri Sovete Ministrov SSSR, 1960. 240 p.
(MIRA 13:7)

1. Chlen-korrespondent AN SSSR (for Smirnov).
(Prospecting) (Uranium ores)

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SHASHKIN, V.L.

New instrument, theberyllometer. Atom.energ. 9 no.4:340-341 O '60. (MIRA 13:9)
(Beryllium)

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SHASHKIN, Viktor Lavrent'yevich; KOKOSOV, L.V., red.; MAZEL', Ye.I., tekhn. red.

[Methods for the analysis of natural radioactive elements] Metody analiza estestvennykh radioaktivnykh elementov. Moskva, Gos. izd-vo lit-ry v oblasti atomnoi nauki i tekhniki, 1961. 149 p. (MIRA 14:11)

(Radioactive substances)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

LEBEDEV, A.M.; TROITSKIY S.G.; SHASHKIN, V.L.

Scale factor for the quantitative interpretation of gamma-ray logging. Atom.energ. 10 no.4:394-396 Ap '61. (MIRA 14:4)
(Logging (Geology)) (Gamma rays)

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B102/B104

21.6000

AUTHORS: Lenin, S. S., Shashkina, N. N., Shashkin, V. L.

TITLE: Use of α-scintillation chambers in the emanation method of radium isotope determination

PERIODICAL: Atomnaya energiya, v. 12, no. 5, 1962, 429-431

TEXT: Emanation measurements were made with α-scintillation chambers recently devised specifically for field measurements [ЭМ-6 (EM-6)] and for laboratory use [РАЛ-1 (RAL-1)]. The chambers are cylindrical and their inner surface is covered with a ZnS coating of 50 - 100 mg/cm^2. The measurements were made with four chambers, 68 mm in diameter and 60, 100, 150, and 250 mm high respectively. The sensitivity was (3 - 4)·10^{-13} Cu/pulse·min, the α-radiation utilization factor was 50%, the total utilization factor was between 11.3 and 18.5%. The former was equal for RaA and RaC' within limits of 10%. The experiments showed that all Rn decay products were deposited at the chamber walls, whereas the Rn was evenly distributed over the volume of the chamber. The background

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amounted to about 1pulse/min. The sensitivities for Th determination were measured at optimal air-jet flow rates (0.15 - 0.38 l/min) and were $(1.1 - 1.8)\cdot 10^{-5}$ g Tn/pulse·min. The chambers can also be used for actinone determination by determining AcX. For these measurements the optimal air flow rate is 2 - 4 l/min. There are 1 figure and 2 tables.

SUBMITTED: February 12, 1960

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, V.L., red.; ZASTAVENKO, V.S., red.; BORISOVSKAYA, M.A., red.; POPOVA, S.M., tekhn. red.

[Radiometry of ores] Voprosy rudnoi radiometrii; sbornik statei. Moskva, Gosatomizdat, 1962. 214 p. (MIRA 15:7)
(Radioactive substances--Spectra)
(Radioactive prospecting)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

TROITSKIY, S.G.; SHASHKIN, V.L.; BYKOVA, K.I.

Instrument spectra of γ'-radiation from infinite strata of uranium ore. Atom. energ. 12 no.1:67-70 Ja '62. (KIRA 15:1)
(Gamma rays--Spectra) (Uranium)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

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TROITSKIY, S.G.; SHASHKIN, V.L.; BYKOVA, K.I.

Possibility for separate determination of uranium and thorium on measurements of γ-ray spectra from ores occurring naturally. Atom. energ. 12 no.1:70-72 Ja '62. (MIRA 15:1)
(Gamma rays--Spectra) (Uranium) (Thorium)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

LENIN, S.S.; SHASHKINA, N.N.; SHASHKIN, V.L.

Use of α-scintillation chambers in determining radium isotopes by the emanation method. Atom. energ. 12 no.5:429-431 My '62. (MIRA 15:5)
(Scintillation counters) (Radium—Isotopes)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

TROITSKIY, S.G.; SHASHKIN, V.L.

Concerning the report by L.S. Polak and others "Studying the spectrum of gamma-ray scattering for solving some geophysical problems." Geol. i geofiz. no.7:107-108 '62.
(MIRA 16:7)

(Rocks—Density)
(Gamma-ray spectrometry)
(Polak, L.S.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu. A., Cand Phys-Math Sci -- (diss) "~~Questions~~ Problems of the Unity and Stability of the potential's reversible problem." Mos, 1957. 22 pp. (Acad Sci USSR, Math Inst im V. A. Steklov), 130 copies. Bibliogr at end of text (10 titles). (KL 9-58, 113)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu. A.

20-1-16/54

AUTHOR: Shashkin, Yu.A.

TITLE: On the Uniqueness in the Inverse Problem of the Potential Theory (O yedinstvennosti v obratnoy zadache teorii potentsiala)

PERIODCIAL: Doklady Akademii Nauk SSSR, 1957, Vol.115, Nr 1, pp. 64 - 66 (USSR)

ABSTRACT: First reference is made to relevant preliminary works. This paper furnishes new sufficient conditions for the uniqueness of the solution of the inverse problem of the logarithmic potential. Three theorems are given:
Theorem 1: When the boundaries C_1 and C_2 of two different convex domains D_1 and D_2 lie in the circular ring $R^2 \leqslant x^2 + y^2 \leqslant 2R^2$ (where R is any positive number), the outer logarithmic potentials of these domains cannot be exactly identical, when these domains are filled with masses with any positive density $\mu(x, y)$.
Theorem 2: The boundary of two different domains starlike with regard to the pole O, may in the polar coordinate system (r, φ) have the equations $r = r_i(\varphi)$ $(i = 1,2)$, where
$|\log \gamma_i(\varphi_1) - \log \gamma_i(\varphi_2)| \leqslant K|\varphi_1 - \varphi_2|$. In this con-

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On the Uniqueness in the Inverse Problem of the Potential Theory

nection $K = tg(\pi/8) = 0,4142$ applies. Then the outer potentials of these domains in the case of any positive densities cannot be identical. The third theorem furnishes a condition for the uniqueness of the solution of the inverse potential problem in the non-starlike classes of domains. Of especial importance in this conncetion is the case that the mass is distributed with uniform density. The proofs of these theorems follow. Finally the following theorem is given: When the values of the potential $V_1(x,y)$ and $V_2(x,y)$ of two domains of the class $\{D\}$ in the case of $y = 0$ differ less than $\delta(\varepsilon)$ for any $\varepsilon > 0$ such a $\delta(\varepsilon) > 0$ exists, that the domains are distant less than ε. There are no figures, 5 Slavic references.

ASSOCIATION: Mathematical Instituteimeni V. A. Steklov, AN SSSR (Matematicheskiy institut im. V.A. Steklova Akademii nauk SSSR)

PRESENTED BY: M.A. Lavrent'yev, Academician, January 15, 1957

SUBMITTED: January 11, 1957

AVAILABLE: Library of Congress

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

AUTHOR: SHASHKIN, Yu.A. 20-118-1-12/58

TITLE: On the Question of the Inverse Problem of Potential Theory (K voprosu ob obratnoy zadache teorii potentsiala)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol 118, Nr 1, pp 45-46 (USSR)

ABSTRACT: Theorem: The domains D_1 and D_2 which are star-shaped with regard to the pole 0 are assumed to be filled with media of constant density μ_1 and μ_2 with $\mu_1 > \mu_2 > 0$. If here the the exterior potentials of the domains are identically equal, then it is $D_1 \subset D_2$.

Theorem: Let D_1 be a plane, simply connected domain limited by an analytic curve. Under filling with mass of the density $\mu_1(x,y) > 0$ D_1 is assumed to possess the exterior potential V. Then there exists a domain G $(D_1 \subset G)$ with the property that each simply connected domain $D_2 \subset G$ possessing for a density $\mu_2(x,y) < \mu_1(x,y)$ the same exterior potential V satisfies the relation $D_1 \subset D_2$. 3 Soviet references are quoted.

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

On the Question of the Inverse Problem of Potential Theory 20-118-1-12/58

ASSOCIATION: Matematicheskiy institut imeni V.A. Steklova Akademii nauk SSSR (Mathematical Institute imeni V.A. Steklov, Academy of Sciences, USSR)

PRESENTED: June 27, 1957, by S.L. Sobolev, Academician

SUBMITTED: June 25, 1957

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

Shashkin, Yu. A.

BOLTYANSKIY, V.G.; KYSHKOV, S.S.; SHASHKIN, Yu.A.

K-regular imbeddings and their application to the theory of approximation of functions. Izv. mat. nauk 15 no. 6:125-132 N-D '60. (MIRA 14:2)

(Topology)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu.A.

Korovkin's systems in spaces of continuous functions. Izv.AN SSSR.Ser.mat. 26 no.4:495-512 Jl-Ag '62. (MIRA 15:8)
(Banach spaces) (Functions, Continuous)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu.A.

On k-regular imbeddings of graphs into Euclidean spaces. Usp. mat. nauk 18 no.4:195-199 Jl-Ag '63. (MIRA 16:9)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu.A.

Note on adjacent vertices of a convex polyhedron. Usp. mat. nauk 18 no.5:209-211 S-O '63. (MIRA 16:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

ACCESSION NR: AP4014374 S/0039/64/063/002/0215/0226

AUTHOR: Shashkin, Yu. A. (Sverdlovsk)

TITLE: Uniqueness and stability theorems for the inverse problem of the logarithmic potential

SOURCE: Matem. sbornik, v. 63, no. 2, 1964, 215-226

TOPIC TAGS: uniqueness, stability, inverse problem, logarithmic potential, attraction, star shaped region, distribution density, positive summable function, compact metric space

ABSTRACT: By inverse problem of the potential the author means the problem of determining the form of an attracting body in view of given values for its exterior potential under the condition that the density of the distribution of the masses is known. He proves uniqueness of the solution of the inverse problem of the logarithmic potential in a subclass of the class of star-shaped (or generally star-shaped) regions under the assumption that the density of the distribution of the masses is an arbitrary summable function. He also proves uniqueness in the case of doubly-connected regions in the plane. However, this latter theorem does not define the class of doubly-connected regions in which the solution of the inverse

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ACCESSION NR: AP4014374

problem is unique; it only asserts that two such regions coincide if their potentials coincide, and under a certain restriction on their relative position. The solution of this problem is said to be stable in some class of bodies if to infinitely small variations of the exterior potentials of bodies of this class correspond infinitely small variations of the bodies. A. N. Tikhonov (Ob ustoychivosti obratny*kh zadach, DAN SSSR, t. 39, No. 5 (1943), 195-198) noted that stability occurs in any compact class of uniqueness. This is a direct result of a known topological theorem: a one-to-one and continuous mapping of a compact metric space is a homeomorphism. Along with qualitative criteria for stability, the author is interested in numerical estimates expressing the deviation of two bodies via the difference of their exterior potentials. He gives such an estimate for the case of the logarithmic potential. "Theorems 1 and 3 of this work (with another value for the constant K) are contained in the author's doctoral dissertation completed under the guidance of P. S. Novikov and written in 1958. The author thanks P. S. Novikov for his attention to this work and his valuable advice and comments." Orig. art. has: 23 formulas and 1 diagram.

ASSOCIATION: none

SUBMITTED: 03May62	DATE ACQ: 05Mar64	ENCL: 00
SUB CODE: MM	NO REF SOV: 013	OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu.A.

Topological properties of sets related to the theory of approximation of functions. Izv. AN SSSR. Ser. mat. 29 no.5:1085-1094 '65.
(MIRA 18:10)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKIN, Yu.A.

Finitely defined linear operators in spaces of continuous functions. Usp. mat. nauk 20 no.6:175-180 N-D '65.
(MIRA 18:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

L 25841-66 EWT(d)/T/EWP(1) IJP(c)

ACC NR: AP6016076 SOURCE CODE: UR/0038/65/029/005/1085/1094

AUTHOR: Shashkin, Yu. A.

ORG: none

TITLE: Topological properties of sets associated with the theory of approximation of functions

SOURCE: AN SSSR. Izvestiya. Seriya matematicheskaya, v. 29, no. 5, 1965, 1085-1094

TOPIC TAGS: topology, approximation, continuous function, mathematic matrix, polynomial

ABSTRACT: Definition: Consider a system of continuous functions $f_0(x)$, $f_1(x)$, ..., $f_m(x)$ on a compact metric space X with the property that for arbitrary distinct points x_0, x_1, ..., x_k in X the rank of the matrix

$$\begin{pmatrix} f_0(x_0) & f_1(x_0) \dots f_m(x_0) \\ f_0(x_1) & f_1(x_1) \dots f_m(x_1) \\ \dots\dots\dots\dots\dots \\ f_0(x_k) & f_1(x_k) \dots f_m(x_k) \end{pmatrix}$$

is k + 1. For any continuous (on X) function of a convex set, this condition is necessary and sufficient for the set of best-approximation polynomials in f_0, f_1, ..., f_m to have dimension

Card 1/2 UDC: 513.83

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L 25641-66

ACC NR: AP6016076

no greater than $r = m - k$; and the system $f_0, f_1, \ldots, f_r$ is then said to have Chebyshev rank $\leq r$. The author studies the topological properties of polyhedra on which there exist systems of functions of a given Chebyshev rank and computes the minimal orders of Korobkin (sic) systems for one-dimensional, locally connected continua and two-dimensional manifolds. Orig. art. has: 9 formulas. [JPRS]

SUB CODE: 12 / SUBM DATE: 15Nov64 / ORIG REF: 011 / OTH REF: 010

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

L 38347-66 EWT(d)/T IJP(c)

ACC NR: AP6027982 SOURCE CODE: BU/0011/66/019/001/0005/0007

AUTHOR: Shashkin, Yu. A. (Sverdlovsk) 25 B

ORG: none

TITLE: Best approximation by rational functions 16

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 19, no. 1, 1966, 5-7

TOPIC TAGS: approximation method, continuous function

ABSTRACT: The author shows what the properties of a bicompact are in the case when for each function $\varphi(x)$ which is continuous within it the rational function closest to $\varphi(x)$ is unique (or when the set of such "best" rational functions has a dimensionality not exceeding a certain number). The results are presented in the form of six theorems, the first of which requires an extensive proof. This paper was presented by Corresponding Member Ya. A. Tagamlitskiy on 24 September 1965. [JPRS: 36,845]

SUB CODE: 12 / SUBM DATE: 24Sep65 / SOV REF: 003 / OTH REF: 005

Card 1/1

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

VOL'FSON, I.S.; TELESHOVA, M.N. Prinimali uchastiye: SHEYKH-ALI, G.A.; KAMALOVA, R.K.; SHERGINA, E.G.; SHASHINA, A.D.

New oil field in the Tatar A.S.S.R. Khim. i tekh. topl. i masel 9 no.5:29-31 5 My'64 (MIRA 17:7)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKINA, A. V.

"Reduction Equilibrium of Magnesium Ferrites With Hydrogen."
Sub 19 Oct 51, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.
Cand. Chemical Sci

SO: Sum. No. 480, 9 May 55

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKINA, A.V.

Equilibrium of the solid solution FeO-MgO with hydrogen and the activity of the components of the solution. A. V. Shashkina and Ya. I. Gerasimov (M. V. Lomonosov State [illegible]). *Zhur. Fiz. Khim.* 27, 399–410(1953).—The equil. of reduction by H of FeO and solid solns. of MgO-FeO (I) of different compns. at 860, 960, and 1060° was studied by the circulation method described by Rezukhina, *et al.* (*Vestnik Moskov. Univ.* 6, 103(1949)). The equil. const. for the reaction $H_2 + FeO + mMgO \rightleftarrows H_2O + Fe + mMgO$ and the activity coeffs. of FeO and MgO are tabulated and plotted as joint functions of temp. and m. The partial and total heats of mixing of I are shown as functions of m. The lattice const. of a sample of I contg. about 50 mol. % MgO was 4.29 A., the same as for FeO. The thermodynamic behavior of I shows a pos. deviation from ideal, increasing with temp.; the partial heats of mixing are neg.

J. W. Loweberg, Jr.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

5(4)

AUTHOR: Shashkina, A.V.

SOV/55-58-5-22/34

TITLE: Investigation of the Reduction and Elektroreduction of Some Organic Substances on an Pd-Electrode. I. Reduction and Electroreduction of Dimethylacetylenylcarbinol (Izucheniye protsessov vosstanovleniya i elektrovosstanovleniya nekotorykh organicheskikh veshchestv na Pd-elektrode.I. Vosstanovleniye i elektrovosstanovleniye dimetilatsetilenilkarbinola)

PERIODICAL: Vestnik Moskovskogo universiteta,Seriya matematiki, mekhaniki, astronomii, fiziki, khimii , 1958,Nr 5,pp 135 - 144 (USSR)

ABSTRACT: The author investigated the adsorption of dimethylacetylenylcarbinol, its reduction and electroreduction on a Pd-electrode in acid and alkaline medium, and the influence of toxication of the electrode by atomic mercury, arsenic and cyan ions on the investigated processes. Under toxication of the electrode with Hg and As the reduction is discontinued in acid medium. Cyan ions in a small quantity activate the process in alkaline medium, however, they decelerate it for large quantities. The influence of these toxications on the electroreduction processes is similar. The corresponding opinions of N.I. Kobozev and V.V. Monblanova [Ref 9] are therefore not confirmed. On the other side it was stated that the investigated processes have the same

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

Investigation of the Reduction and Electroreduction of Some Organic Substances on a Pd-Electrode. I. Reduction and Electroreduction of Dimethylacetylenylcarbinol SOV/55-58-5-22/34

character as for application of Pt-electrodes (see A.I. Shlygin [Ref 1]).
There are 10 figures, and 9 references, 6 of which are Soviet, and 3 German.

ASSOCIATION: Kafedra fizicheskoy khimii (Chair of Physical Chemistry)

SUBMITTED: October 4, 1957

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

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SOV/55-59-3-18/32

AUTHOR: Shashkina, A. V.

TITLE: Investigation of the Processes of the Reduction and Electroreduction of Some Organic Substances on a Pd Electrode. III. Reduction and Electroreduction of Nitromethane

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1959, Nr 3, pp 135 - 149 (USSR)

ABSTRACT: The author investigated the adsorption of nitromethane on palladium, its reduction by sorbed hydrogen, and its electroreduction, as well as the influence exerted by the medium and the poisoning of the palladium electrode upon the reaction. The experiments were carried out in 0.1 N H_2SO_4 or 0.1 N KOH.

The electrode consisted of palladium upon which palladium black had been deposited. The present paper gives a detailed description of the adsorption of nitromethane (Fig 1), its reduction by sorbed H in an acid and alkaline medium, as well as of the effect produced by doses of various strength of Hg and As in an acid medium and of cyanogen ions in an alkaline medium (Figs 2 - 5). Furthermore, the electroreduction of nitromethane

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

Investigation of the Processes of the Reduction and Electroreduction of Some Organic Substances on a Pd Electrode. III. Reduction and Electroreduction of Nitromethane

(Fig 6) and the influence of Hg, As, and cyanogen ions upon the latter were potentiometrically investigated (Figs 7 - 10). The author obtained the following results: Nitromethane is adsorbed very quickly on the electrode. Within the first minute adsorption already amounts to 85% approximately in an acid, and 70% approximately in an alkaline medium. The nitro group is directed towards the electrode. During adsorption, there is electronic interaction between nitromethane and the electrode. The poisoning of the Pd electrode with small quantities of Hg, As, and cyanogen ions accelerates the reduction of nitromethane by sorbed H. The velocity of this reaction depends on the binding energy of the sorbed H and on the velocity of its diffusion toward the surface of the cathode. Nitromethane is reduced nearly solely by H with a low binding energy, and the latter is reduced by small additions of poison. The electroreduction of nitromethane develops very quickly in an acid medium, whereas it does not occur at all in an alkaline medium. In the electroreduction of nitromethane on a Pd electrode which contained sorbed H an

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

Investigation of the Processes of the Reduction and Electroreduction of Some Organic Substances on a Pd Electrode. III. Reduction and Electroreduction of Nitromethane

activation of this process was observed in an acid medium, which was gradually suppressed by increasing poisoning with Hg or As. In an acid medium electroreduction develops as a result of protonic or electronic reaction, in which case the latter predominates. Poisoning of the electrode by considerable quantities of Hg and As suppresses protonic reaction. Small quantities of cyanogen ions cause an electroreduction of nitromethane in an alkaline medium. The author mentions a paper by N. A. Izgaryshev and A. A. Petrova (Ref 2). There are 10 figures and 7 references, 1 of which is Soviet.

ASSOCIATION: Kafedra fizicheskoy khimii (Chair of Physical Chemistry)

SUBMITTED: October 4, 1957

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKINA, A.V.

Studying the reduction and electrolytic reduction of some organic substances on a Pd electrode. Part 2: Reduction and electrolytic reduction of allyl alcohol. Vest.Mosk.un.Ser.mat., mekh., astron., fiz., khim. 14 no.1:121-133 '59. (MIRA 13:8)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.
(Allyl alcohol)
(Reduction, Chemical)
(Reduction, Electrolytic)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHAS[illegible], [illegible]

Study of nitrobenzene reduction on [illegible] pd electrode. Vest.Mosk. un.Ser.2 Khim. 16 no.[illegible] [illegible] [illegible] [illegible]. (MIRA 14:[illegible])

1. [illegible] fizicheskoy [illegible] Moskovskogo gosudarstvennogo universiteta.

([illegible])
(Reduction, Electrolytic)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

SHASHKINA, A.V.; KULAKOVA, I.I. (Moskva)

Reduction and electrolytic reduction of organic substances on a Pd electrode. Part 1: Reduction and electrolytic reduction of acrolein. Zhur. fiz. khim. 35 no. 4:793-802 Ap '61. (MIRA 14:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Acrolein) (Reduction, Electrolytic)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9

KULAKOVA, I.I.; SHASHKINA, A.V.

Reduction and electroreduction of organic compounds of the Pd electrode. Part 3: Reduction and electrolytic reduction of methacrylic acid. Zhur.fiz.khim. 35 no.6:1198-1207 Je '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Methacrylic acid) (Electrochemistry)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630005-9"